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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,856

12/09/2003

Donal P. Geraghty

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4243

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7590

03/09/2005

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EXAMINER

NGUYEN, KHAI M

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/731,856	Applicant(s) GERAGHTY ET AL.	
	Examiner Khai M. Nguyen	Art Unit 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1, 11, 19-20, 27, 34-40, and 42-45 is/are rejected.
- 7) ☒ Claim(s) 2-10, 12-16, 21-26, 28-32, 41 and 46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Remarks*

1. Applicant's arguments with respect to the currently rejected claims have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 36-40, and 42-45 each recites the limitation "the channel" in line 3. There is insufficient antecedent basis for this limitation in the claim. Correction or clarification is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 11, 19-20, 27, 34-40, and 42-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowers et al. (US 6,292,123) (or **Bowers**).

Regarding claim 1, Bowers discloses an integrated circuit, comprising: a digital-to-analog converter (DAC) (the DAC portion 48); a clear or reset code register (42) for storing a predetermined digital clear or reset code value (column 6, lines 65-67); and a control circuit (the CMOS control circuit – column 3, lines 6+) responsive to a clear/reset command signal (signal produced by circuit 10 of Fig. 4) for transferring the

Art Unit: 2819

predetermined digital clear or reset code value from the clear code register (44,46) to the DAC portion 48, so that the DAC outputs an analogue output signal (ANALOG OUTPUT) corresponding to the clear code (the digital signal(s) provided from the register 42) in the clear or reset condition.

Regarding claims 27 & 35, Bowers discloses the register (42) is programmable or re-settable.

Regarding claims 11 & 34, Bowers discloses Fig. 4 included an input terminal (the input terminal of the register 42) for receiving the clear or reset signal as an externally (relative to the register 42) generated clear or reset signal.

Regarding claims 36-37, 42, Bowers discloses the predetermined digital clear or reset code value stored in the clear code register (42) is of value (digital values) for providing the analogue output signal (ANALOG OUTPUT) outputted by the DAC portion (48) on an analogue output terminal of the channel to be of a predetermined analog voltage value.

Regarding claims 38, 43, Bowers discloses the clear code register stored in the clear code register is of value for providing the analogue output signal outputted by the DAC on an analogue output terminal to be zero volt (because of the reset/clear signal resets the register (42) to zero – column 6, line 66-67).

Regarding claims 39-40, and 44-45, Bowers discloses the predetermined digital clear or reset code value stored in the clear code register (42) is of value (digital or binary values) for providing the analogue output signal (ANALOG OUTPUT) outputted

Art Unit: 2819

by the DAC portion (48) on an analogue output terminal of the channel with correction for voltage offset in the DAC.

Regarding claim 19, this method claim is associated with the apparatus of claim 1; therefore, it is rejected for the similar reasons as above.

Regarding claim 20, Bowers discloses the clear code is written to the clear code register.

### ***Allowable Subject Matter***

5. Claims 17-18 are allowed.
6. Claims 2-10, 12-16, 21-26, 28-32, 41, and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571-272-1809. The examiner can normally be reached on 8:00 to 4:30 M-F.

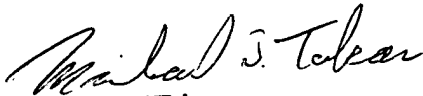
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2819

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KN

March 3, 2005

  
**Michael Tokar**  
Supervisory Patent Examiner  
Technology Center 2800